Exxon Mobil Refining & Supply Company 3225 Gallows Road Fairfax, VA 22037

Derek B. Wheeler U.S. GHG Issue Manager Regulatory Affairs



August 11, 2011

Kevin Kennedy California Air Resources Board 1001 I Street Sacramento, CA 95814

Subject: ExxonMobil Comments on CARB's Proposed Modifications to the California Cap-and-Trade Regulation (Posted July 25, 2011)

Dear Mr. Kennedy:

ExxonMobil appreciates the opportunity to provide comments to the California Air Resources Board (CARB) on the Proposed Modifications to the California Cap-and-Trade regulation, posted July 25, 2011.

ExxonMobil supports public policy that recognizes the important need for meeting the world's demands for affordable energy while reducing greenhouse gas (GHG) emissions in a cost effective manner.

ExxonMobil believes that GHG emissions reduction policy is better addressed through coordinated national and international policy rather than individual state or regional programs.

Since CARB has elected to advance Cap-and-Trade to achieve the goals of AB32, and has invited public comment on the most recent draft of the regulation, ExxonMobil must identify two strong concerns that we would ask CARB to consider for the next draft regulation.

These concerns involve:

- The proposed benchmarking methodology to allocate free allowances to the refining sector,
  and
- 2) The proposed 10% reduction in free allowances to the refining sector from the start of the program.

## Benchmarking

In the draft regulation, free allowances are allocated to facilities according to a benchmark set at a desired standard of performance. The benchmark is set at 90% of the sector's average emissions (tons CO2) per barrel of product. This approach is referred to as 'Simple Barrels'.

Unfortunately, the effect of this approach is to penalize refineries that have invested to meet California product specifications and other "clean fuel" mandates.

ExxonMobil believes that the Simple Barrels approach is inappropriate as a benchmark for refining, given the vast differences in refining complexity across the sector. Refineries vary significantly according to the crude inputs and product outputs for which they have been designed. To produce greater yields of California specification gasoline and diesel from crude, more processing is required. More processing (greater complexity) requires more equipment and more energy per barrel of product. Though more energy is required, more desired products are produced from a given quantity of crude. Using that energy as efficiently as possible is and has been a top priority for refineries. ExxonMobil has spent years optimizing its operations and equipment in order to both meet product demand in California and maximize energy efficiency. With energy costs comprising up to 50% or more of a refiner's operating costs, there is strong incentive to maintain keen focus on energy efficiency. This focus improves energy performance and reduces emissions.

The Simple Barrels approach does not recognize the differences in refinery complexity and, therefore, does not appropriately measure performance across all refineries. Moreover, the benchmark favors simple refinery configurations. The result is a benchmark that rewards a facility according to the amount of equipment it contains rather than according to the efficiency with which it operates that equipment. It is like measuring the value of a book by the number of pages, rather than the content. Hence, refineries will be incentivized to simplify operations and configuration rather than operate more efficiently.

The Simple Barrels approach may lead to unintended consequences. For example, simplifying operations would result in a mismatch between the fuels produced by refineries and the demands of consumers. A complex facility that is driven to minimize its level of processing may have to run more crude to deliver the equivalent volume of desired products, which may increase total CO2 emissions. If a facility lacked capacity for this additional crude, it might have to rely more heavily on product imports, which could lead to emissions leakage. The facility might also have to export poorer quality product streams that do not meet customer needs.

The Energy Efficiency Based Allowance Distribution Methodology proposed by the Western States Petroleum Association (WSPA) for the first compliance period addresses these issues. This methodology utilizes a complexity-based metric, namely Solomon Associates' Energy Intensity Index (EII), to measure performance. The EII metric examines the efficiency of each process in a refinery as it relates to overall facility efficiency, and it has been developed over decades to more accurately describe a refinery's energy performance. The Energy Efficiency Based Allowance Distribution Methodology, or a similar approach, would recognize differences in complexity among refineries and enable distribution of allowances according to efficiency.

Complexity-based approaches have been recognized by both industry and government organizations as appropriate for measuring performance in the refining sector. Beginning in 2013, the European Union will use a Solomon-based Complexity Weighted Tonne metric as the benchmark for allocating free allowances in its Emissions Trading System. Ell is also recognized by the Environmental Protection Agency in their ENERGY STAR program. We believe complexity-based metrics like these are suitable for use in the California Cap-and-Trade program and would be more effective than the Simple Barrels approach for allocation.

## 10% Reduction in Allowances

The free allowance allocation methodology applies an arbitrary factor of 0.9 to the benchmark, resulting in a 10% reduction in allowances to the sector. This reduction is required from the start of the program and is in addition to the successive annual cap reductions required under AB32. Not only is this reduction excessively difficult when compounded with the cap reduction but it also undermines the emissions leakage protection that CARB intended to provide. The Assistance Factor of 100% for the first compliance period was intended by CARB to avoid leakage as trade-exposed industries transitioned into the program. Refining is a highly trade-exposed industry and California refiners stand to lose competitiveness if subject to excessive regulation that refiners outside of the State are not. A reduction as significant as 10% has the potential to make California refining uncompetitive, leading to leakage of investment, production, jobs and emissions.

Thank you for considering our views. We look forward to engaging with CARB further on the design of the Cap-and-Trade program and would welcome any inquiries on any aspect of our comments. Please contact David Ligh at (916) 444-7852 if you wish to discuss further.

Sincerely,

Derek B. Wheeler

U.S. GHG Issue Manager ExxonMobil Refining and Supply

rek B. Wheele